

WOODS

1023000

4-POINT SUB-FRAME MOUNTING KIT

On Kubota® M8540, M9540
2WD and FWA Cab Tractors

For BH90-X Backhoe

With Woods LU132, 1020, 1027 Loaders
Or Kubota LA1153 Loader

Includes Hose Kit
1024317

MAN0579

(1/19/2007)

**SAVE THIS
MANUAL!**

Include it with the
backhoe manual. It
contains safety,
operation, and repair
part information not
found in other
manuals.

WOODS®

Tested. Proven. Unbeatable.

INSTALLATION MANUAL

TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Woods® dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Operator's Manual are completed before releasing equipment to the owner.

The dealer must complete the Product Registration included with this manual. The customer must sign the registration which certifies that all Dealer Check List items have been completed. The dealer is to return the prepaid postage portion to Woods, give one copy to the customer, and retain one copy. **Failure to complete and return this card does not diminish customer's warranty rights.**

TO THE OWNER:

Read this manual before operating your Woods equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Woods dealer has trained mechanics, genuine Woods service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine Woods service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model: _____ **Date of Purchase:** _____

Serial Number: (see Parts section for location) _____

Provide this information to your dealer to obtain correct repair parts.

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING**, and **DANGER** are used in conjunction with the Safety-Alert Symbol (a triangle with an exclamation mark) to indicate the degree of hazard for items of personal safety.



This Safety-Alert Symbol indicates a hazard and means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.



Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

IMPORTANT

Indicates that failure to observe can cause damage to equipment.

NOTE

Indicates helpful information.

WOODS®

ALITEC™

BMP®

CENTRAL FABRICATORS®

GANNON®

GILL®

WAIN-ROY®

WOODS®

2 Introduction

SFMK (Rev. 6/6/2005)

SAFETY RULES



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



¡LEA EL INSTRUCTIVO!

Si no lee Ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad.

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

It has been said, "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

■ **This Sub-Frame Mounting Kit is only for the backhoes and tractors specified in the Sub-Frame Mount Installation section of this manual. Any other use or modification of this mounting kit may result in serious injury or death.**

■ **Hydraulics must be connected as instructed in this manual. Do not substitute parts, modify, or connect in any other way.**

■ **After connecting hoses, check that all control lever positions function as instructed in the Operator's Manual. Do not put into service until control lever and equipment movements are correct.**

■ **Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals and safety decals are available from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.) Failure to follow instructions or safety rules can result in serious injury or death.**

■ **Know your controls and how to stop engine and attachment quickly in an emergency.**

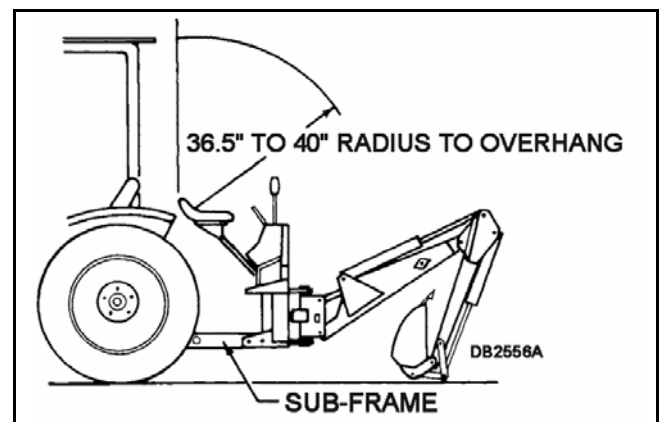
■ **Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.**

■ **Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**

■ **To prevent contamination during maintenance and storage, clean and then cover hose ends, fittings, and hydraulic ports with tape.**

■ **Check that all hardware is properly installed. Always tighten to torque chart specifications unless instructed otherwise in this manual.**

■ **This mounting kit is designed to provide secure mounting and adequate operator clearance for most operators when properly installed. Check clearance dimensions shown below to be sure you have installed seat bracket correctly. In some cases it may be necessary to adjust the seat to the lowest position and/or as far forward as possible in order to achieve the ideal 40-inch clearance. For 36.5-inch radius operation, taller operators may need to wear a hardhat for greater comfort and safety.**



■ **Air in hydraulic systems can cause erratic operation and allows loads or equipment components to drop unexpectedly. When connecting equipment or hoses or performing any hydraulic maintenance, purge any air in hydraulic system by operating all hydraulic functions several times. Do this before putting into service or allowing anyone to approach the equipment.**

■ **Protective hose sleeves must cover all hydraulic hoses within 20 inches of the operator and be secured onto metal hose fittings. Replace hoses or sleeves if damaged or if protective sleeve cannot be properly positioned or secured.**

(Safety Rules continued on next page)

SAFETY RULES



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



(Safety Rules continued from previous page)

■ Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.

■ Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

■ Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in “locked up” position at all times.

■ Remove seat and upper support assembly before installing or removing backhoe from tractor. Failure to comply may result in equipment failure and/or personal injury.

■ Make sure attachment is properly secured, adjusted, and in good operating condition.

■ A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a loader. Weigh the tractor and equipment. Do not estimate.

■ Do not install backhoe and required counterweights on tractor if the total tractor and equipment weight then exceeds the ROPS weight certification of the tractor. To reduce overall weight of unit, remove liquid from rear tires and remove mid-mount mower, if equipped.

■ Do not allow bystanders in the area when operating, attaching, removing, assembling, or servicing equipment.

■ Before operating, make sure stabilizer pads are lowered firmly to the ground. Stabilizer arms provide support for the backhoe and support for the backhoe mounting brackets.

■ The only time the backhoe may be operated from a position other than the operator seat is during backhoe attachment and removal. Operator must:

- Read Mounting Kit Manual instructions on attaching and removing backhoe and use extreme care.
- Always stand between rear tire and backhoe stabilizer arms or along side of tractor to avoid being trapped should the boom swing control be accidentally activated.

■ Never leave equipment unattended with engine running or with bucket in raised position. Always engage swing and boom transport locks, relieve system pressure by operating controls, and remove ignition key before leaving equipment.

■ Refer to backhoe manual and follow all maintenance safety rules and instructions.

■ Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.

■ Keep all persons away from operator control area while performing adjustments, service, or maintenance.

■ Tighten all bolts, nuts, and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.

■ Make sure all safety decals are installed. Replace if damaged. (See Parts section for location.)



BACKHOE SUB-FRAME INSTALLATION

Tractor Preparation

WARNING

■ Only use 1023000 4-Point Sub-Frame Mounting Kit for mounting Woods BH90-X backhoe on Kubota® M8540 and M9540 2WD and FWA cab tractors with either Woods LU132, 1020, 1027 loaders or Kubota LA1153 loader. Do not mount backhoe to tractors not equipped with front end loader. Any other use or modification of this mounting kit may result in serious injury or death.

For installing this sub-frame, references to right, left, forward and rearward directions are determined from the operator's position in the tractor seat.

Leave all hardware loose until sub-frame has been completely installed or otherwise specified in the instructions.

Do not install 1023000 4-point sub-frame on a tractor without a Woods or Kubota loader attached.

Place jackstands under rear axle and remove both rear tires.

Remove 3-point arms and anti-sway bars from the tractor. Store for later use when backhoe is removed.

Remove anti-sway link bracket from right and left sides of tractor axle. See Figure 1.

Remove 3-point cylinder brackets from right and left sides of tractor. Save hardware for reuse.

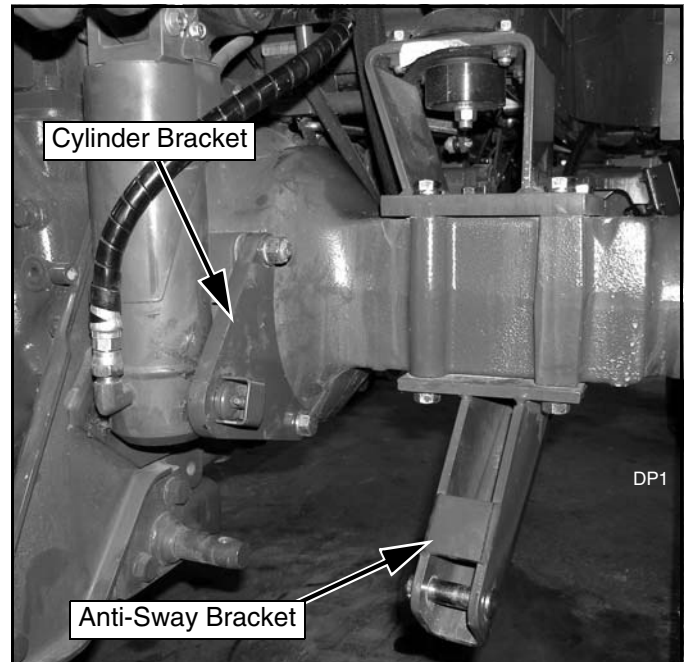


Figure 1. Right Anti-Sway and Cylinder Brackets

Install Cylinder Brackets

1. Attach cylinder bracket (22) to the right side of the axle housing and cylinder using tractor hardware previously removed.
2. Repeat step to install second cylinder bracket on left side of tractor.

22. 1023001 Cylinder bracket

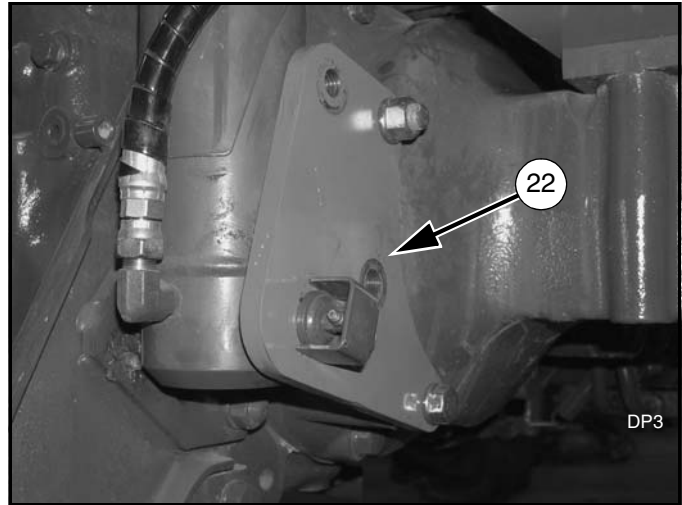


Figure 2. Cylinder Bracket Installed, Right Side

Install Right and Left Top Brackets

1. Remove the four bolts securing the cab support to the top of the right axle housing.
2. Place right top bracket (5) around cab support and align holes.
3. Secure to top of axle housing using four cap screws (14) and hardened flat washers (17).
4. Repeat steps to install left top bracket (6).

5. 1024050 Right top bracket

6. 1024051 Left top bracket

14. 59246 M16 x 1.5P x 60 mm HHCS

17. 57817 5/8 Hardened flat washer

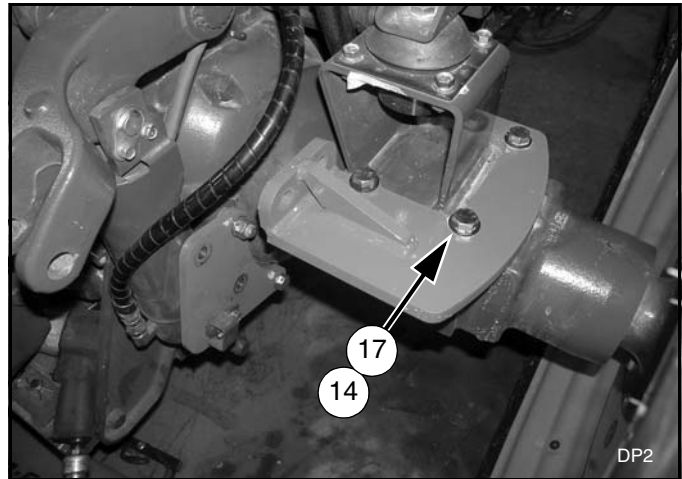


Figure 3. Right Top Bracket Installed

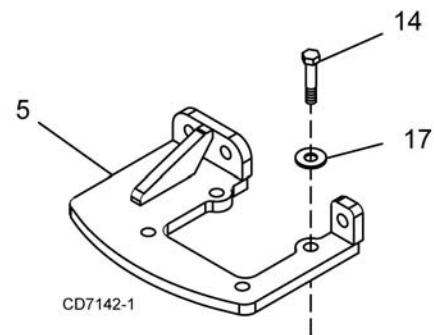


Figure 4. Right Top Bracket Installation

Install Right and Left Tractor Brackets

1. Hook right tractor bracket (1) over rear axle. Secure to the bottom of the axle housing using four cap screws (15) and hardened flat washers (17).
2. Place spacers (9) between cylinder bracket (22) and tractor bracket (Figure 6). Secure to cylinder bracket using two cap screws (11) and hardened flat washers (17).
3. Attach to top bracket (5) using three cap screws (12), six hardened flat washers (17), and hex nuts (20).
4. Repeat steps to install left tractor bracket (2).

1. 1023004 Right tractor bracket
2. 1023005 Left tractor bracket
5. 1024050 Right top bracket
6. 1024051 Left top bracket
9. 1024061 Spacer, 2.1"
11. 300457 5/8 NC x 3-3/4 HHCS GR5
12. 902 5/8 NC x 2 HHCS GR5
15. 307431 M16 x 1.5P x 45 mm HHCS
17. 57817 5/8 Hardened flat washer
20. 230 5/8 NC Hex nut
22. 1023001 Cylinder bracket

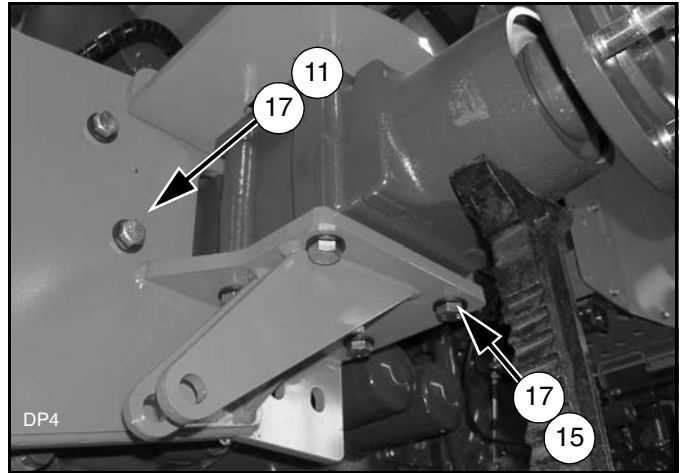


Figure 5. Right Tractor Bracket Installed, Bottom

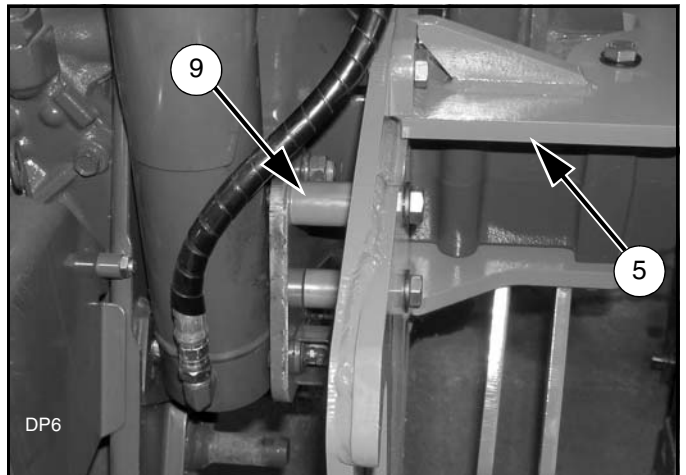


Figure 6. Tractor Bracket to Cylinder Bracket

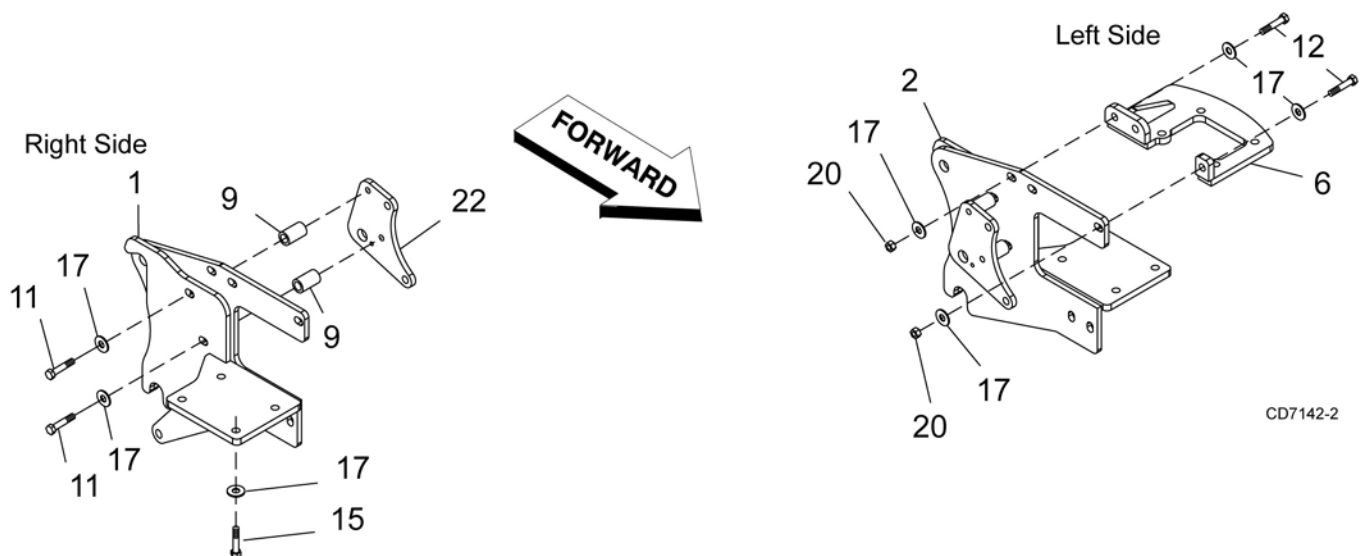


Figure 7. Tractor Bracket Installation

Install Crossmember

1. Place crossmember (7) in front of drawbar bracket and secure using two cap screws (15) and hardened flat washers (17).
2. Secure to right and left tractor brackets using four (two per side) cap screws (12), eight (four per side) hardened flat washers (17) and hex nuts (20).

- | | | |
|-----|---------|--------------------------|
| 7. | 1024052 | Crossmember |
| 12. | 902 | 5/8 NC x 2 HHCS GR5 |
| 15. | 307431 | M16 x 1.5P x 45 mm HHCS |
| 17. | 57817 | 5/8 Hardened flat washer |
| 20. | 230 | 5/8 NC Hex nut |

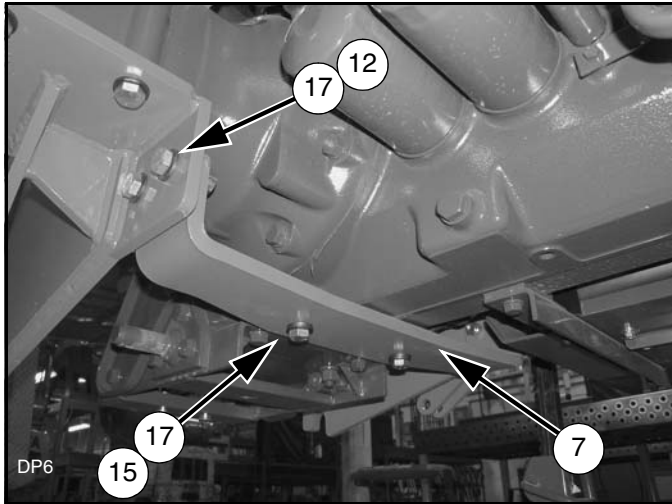


Figure 8. Undermount Installed

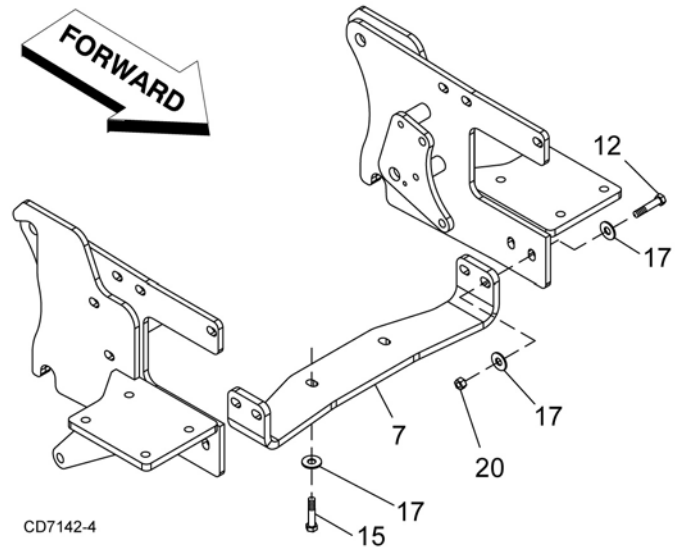


Figure 9. Undermount Installation

Torque Mounting Hardware

TORQUE SPECIFICATIONS				
Ref	Cap Screw	Qty	Wrench Size	Required Torque
11	5/8 NC x 3-3/4 HHCS GR5	4	15/16"	170 lbs-ft (230 N-m)
12	5/8 NC x 2 HHCS GR5	10	15/16"	170 lbs-ft (230 N-m)
14	M16 x 1.5P x 60 mm CL 10.9	8	24 mm	184 lbs-ft (250 N-m)
15	M16 x 1.5P x 45 mm	10	24 mm	133 lbs-ft (181 N-m)

Attach Backhoe Brackets to Backhoe

NOTE: Leave all hardware loose until backhoe has been mounted to the tractor.

1. Attach right backhoe bracket (3) and left backhoe bracket (4) to backhoe frame.
2. Secure into position using six (three per bracket) cap screws (10), hardened flat washers (16), and hex nuts (19).
3. Place crossbrace (8) between right and left backhoe brackets. Secure using four cap screws (13), hardened flat washers (18), and hex nuts (21).

- | | | |
|-----|---------|--------------------------|
| 3. | 1023006 | Right backhoe bracket |
| 4. | 1023007 | Left backhoe bracket |
| 8. | 1024322 | Crossbrace |
| 10. | 735 | 3/4 NC x 2 HHCS GR5 |
| 13. | 3379 | 1/2 NC x 1-1/2 HHCS GR5 |
| 16. | 57798 | 3/4 Hardened flat washer |
| 18. | 57816 | 1/2 Hardened flat washer |
| 19. | 1450 | 3/4 NC Hex nut |
| 21. | 1093 | 1/2 NC Hex nut |

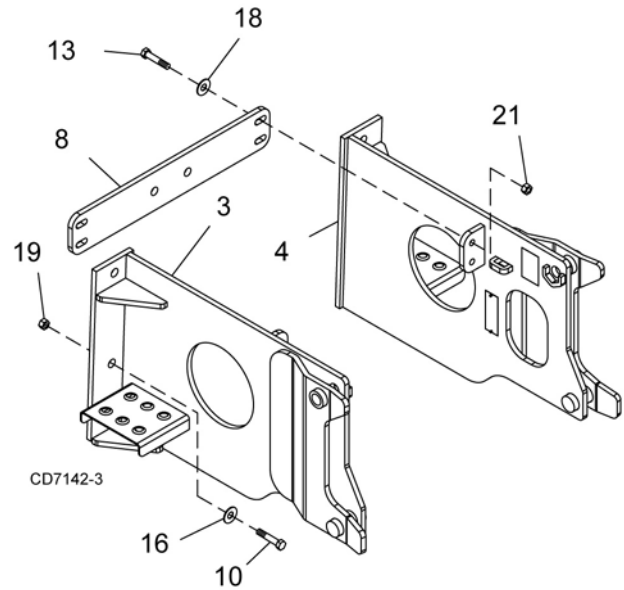


Figure 10. Backhoe Bracket Installation

As a valued customer, Woods appreciates your comments. Once sub-frame and hydraulic hoses have been installed, please take a few minutes to complete the Sub-Frame Mount Evaluation sheet that was supplied with your sub-frame. Your comments will help us continue to bring you quality products.

HYDRAULIC INSTALLATION

⚠ WARNING

■ Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.

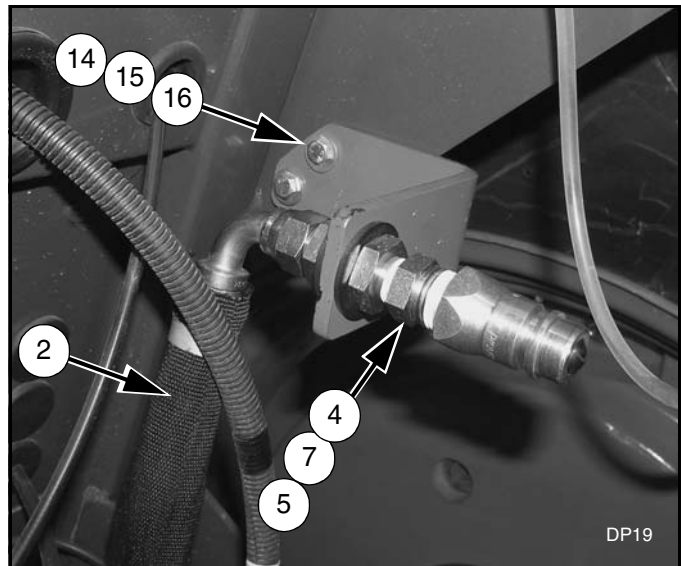
■ Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.

⚠ WARNING

■ Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.

Install Hydraulic Fittings and Hoses

1. Attach bulkhead adapter (4), adapter (7) and male quick coupler (5) to bulkhead adapter bracket (13).
2. Attach bulkhead adapter bracket assembly to the inside of right rear fender using two cap screws (14), flat washers (15), and hex nuts (16).
3. Attach end of hose (2) to the back side of bulkhead adapter (4).



Continued on next page.

Figure 11. Bulkhead Adapter Bracket Installed

Install Hydraulic Fittings and Hoses (Continued)

4. Locate the hydraulic tee on the right side of the tractor and remove the hydraulic cap (Figure 12).
5. Route hose (2) over rear axle and connect opposite end of hose to hydraulic tee (Figure 13).

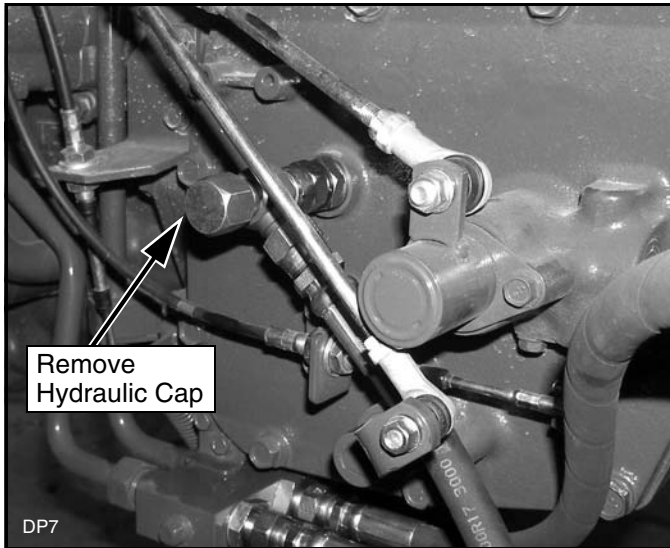


Figure 12. Remove Hydraulic Cap (Typical)

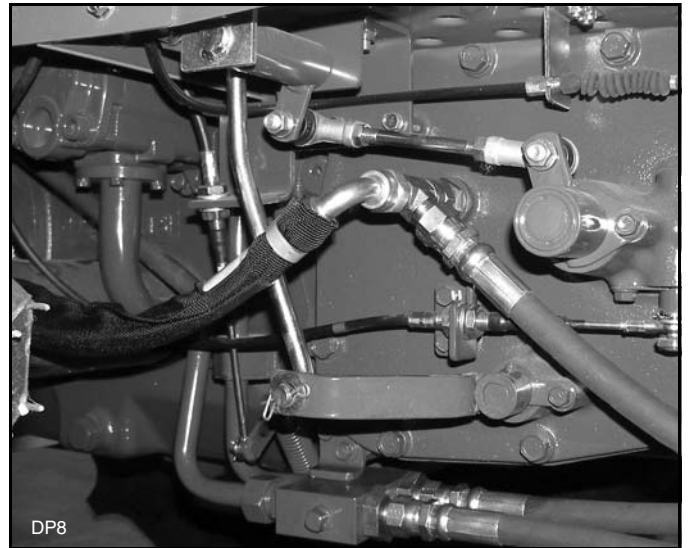


Figure 13. Hose Connection

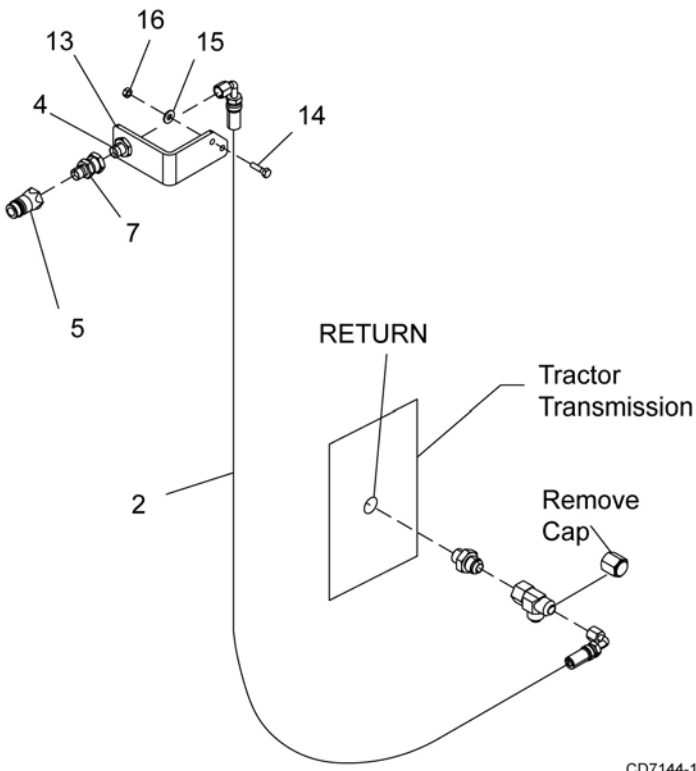


Figure 14. Hose assembly

2. 1021004 Hose, 45" x 3/4 JICF x 7/8 JICF 90°
4. 1006144 Adapter, Bulkhead 3/8 NPTM x 3/4 JICM
5. 26124 Quick coupler set, male & female 1/2
7. 10802 Adapter, 3/8 NPTF x 1/2 NPTM
10. 307126 M8 x 1.25P x 55 mm HHCS
11. 4378 5/16 Flat washer
12. 30515 M8 x 1.25P Hex nut
13. 1021007 Bulkhead adapter bracket
14. 10378 1/4 NC x 1 HHCS GR5
15. 5336 1/4 Flat washer
16. 5288 1/4 NC Hex nut

Install Backhoe Valve Hoses

1. Install adapters (8) to the backhoe valve IN and OUT ports.
2. Attach male quick coupler (6) to the end of hose (3).
3. Attach opposite end of hose (3) to backhoe valve IN port.
4. Attach female half of quick coupler set (5) to end of second hose (3).
5. Attach opposite end of hose (3) to backhoe valve OUT port.

3. 1024314 Hose, 64" x 1/2 NPTM x 3/4 JICF
5. 26124 Quick coupler set, 1/2
6. 66511 Quick coupler, male 1/2
8. 316016 Adapter, 3/4 JICM x 7/8 ORBM

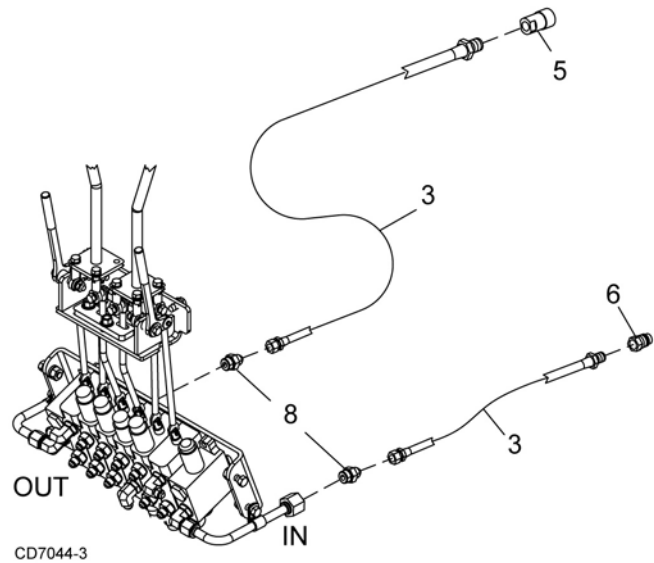


Figure 15. Backhoe Valve Hose Assembly

Backhoe to Tractor Hose Connection

1. Connect female quick coupler (5) on end of hose (3) from the backhoe valve OUT port to male quick coupler (5) on the bulkhead adapter bracket.
2. Connect male quick coupler (6) on hose (3) from the backhoe valve IN port to one of the tractor rear remote couplers.

3. 1024314 Hose, 64" x 1/2 NPTM x 3/4 JICF
5. 26124 Quick coupler set, 1/2
6. 66511 Quick coupler, male 1/2

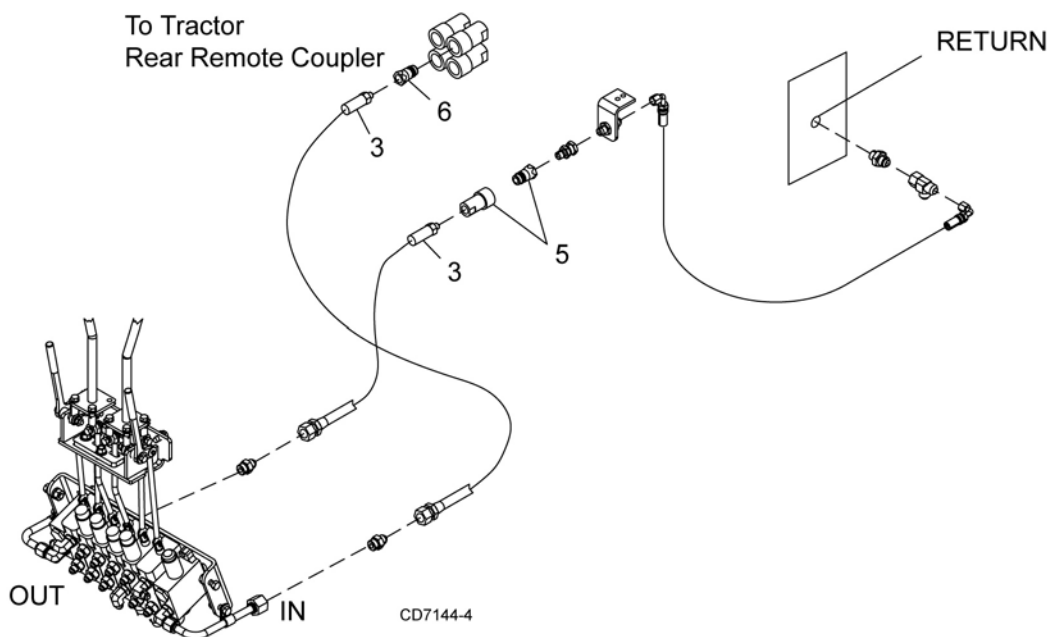
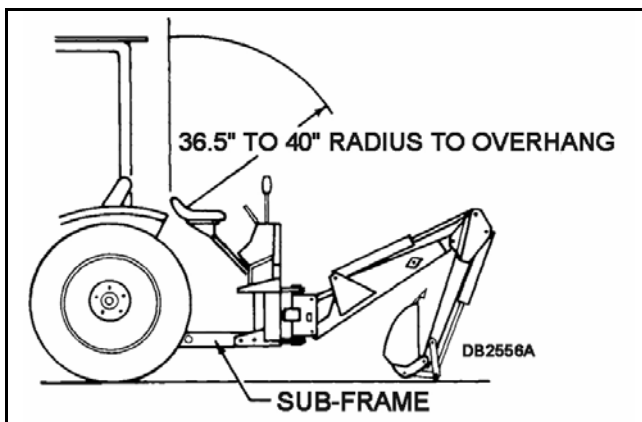


Figure 16. Backhoe to Tractor Hose Connection

Mount Backhoe to Tractor

DANGER

■ This mounting kit is designed to provide secure mounting and adequate operator clearance for most operators when properly installed. Check clearance dimensions shown below to be sure you have installed seat bracket correctly. In some cases it may be necessary to adjust the seat to the lowest position and/or as far forward as possible in order to achieve the ideal 40-inch clearance. For 36.5-inch radius operation, taller operators may need to wear a hardhat for greater comfort and safety.



■ The only time the backhoe may be operated from a position other than the operator seat is during backhoe attachment and removal. Operator must:

- Read Mounting Kit Manual instructions on attaching and removing backhoe and use extreme care.
- Always stand between rear tire and backhoe stabilizer arms or along side of tractor to avoid being trapped should the boom swing control be accidentally activated.

WARNING

■ Remove seat and upper support assembly before installing or removing backhoe from power unit. Failure to comply may result in equipment failure and/or personal injury.

Hydraulic System Check List

Complete check list prior to backhoe operation.

- ___ Check that backhoe hydraulic pump is secured to the tractor PTO, if equipped.
- ___ Check all hydraulic fittings and lines to be sure they are tight and free of kinks or twists.
- ___ Check the backhoe hydraulic reservoir (if equipped) to make sure backhoe PTO driven hydraulic system is full (approximately 6.5 to 7 US gallons). Service if necessary.

NOTE: See the BH90-X Backhoe Operator's Manual for hydraulic oil recommendations. Do not mix hydraulic fluid types.

Mount Backhoe

1. Remove the backhoe seat assembly.
2. Back tractor up to backhoe and center mount between the tractor rear tires. Position tractor so that the hydraulic system can be connected. Shut off tractor, set brake, remove key.
3. Attach backhoe hydraulic system.
 - A. Connect hydraulic hoses. See Figure 16.

OR

 - B. Connect hydraulic pump.
3. With the tractor PTO and transmission in neutral, start the engine and run at low idle. Hydraulic power is provided when the tractor is started.

NOTE: Very little engine power is required to operate the hydraulic system in this mode. Should the engine pull down excessively, check the plumbing hook-up for reversed lines or a control lever stuck in an operating position.

NOTE: You will use the backhoe hydraulics to maneuver the backhoe brackets into position. Use care in this procedure to avoid being trapped between tractor and backhoe or between backhoe parts.

(Continued on next page)

Mount Backhoe to Tractor (Continued)

Refer to Figure 17.

4. Using the backhoe hydraulics, position the backhoe brackets at a slight angle, approximately 5- to 10-degrees.
5. Raise backhoe up by lowering stabilizers and boom section until backhoe mounting pins on backhoe brackets are slightly lower than tractor bracket hooks.
6. Slowly move tractor back until backhoe brackets are positioned below the tractor bracket hooks. Set tractor brake.
7. Raise backhoe bracket bottom mounting pins into tractor bracket bottom hooks.
8. Rotate backhoe bracket upper mounting slots over tractor bracket mounting holes and align holes.
9. Install cap screws (23) and slotted hex nuts (24). Tighten with 1-1/2-inch open end wrench provided with kit. Return wrench to storage position (see Figure 17).
10. Secure hex nut into position with klik pin (25).
11. Shut off tractor and remove key.
12. Tighten hardware with backhoe secured to the tractor. This will ensure proper alignment and fit-up for future installation.
1/2 NC x 1-1/2 85 lbs-ft (115 N-m)
3/4 NC x 2 297 lbs-ft (403 N-m)
13. Reinstall seat.
14. Start tractor and put backhoe into transport position (see Backhoe Operator's Manual).

NOTE: Install swing lock before transporting.

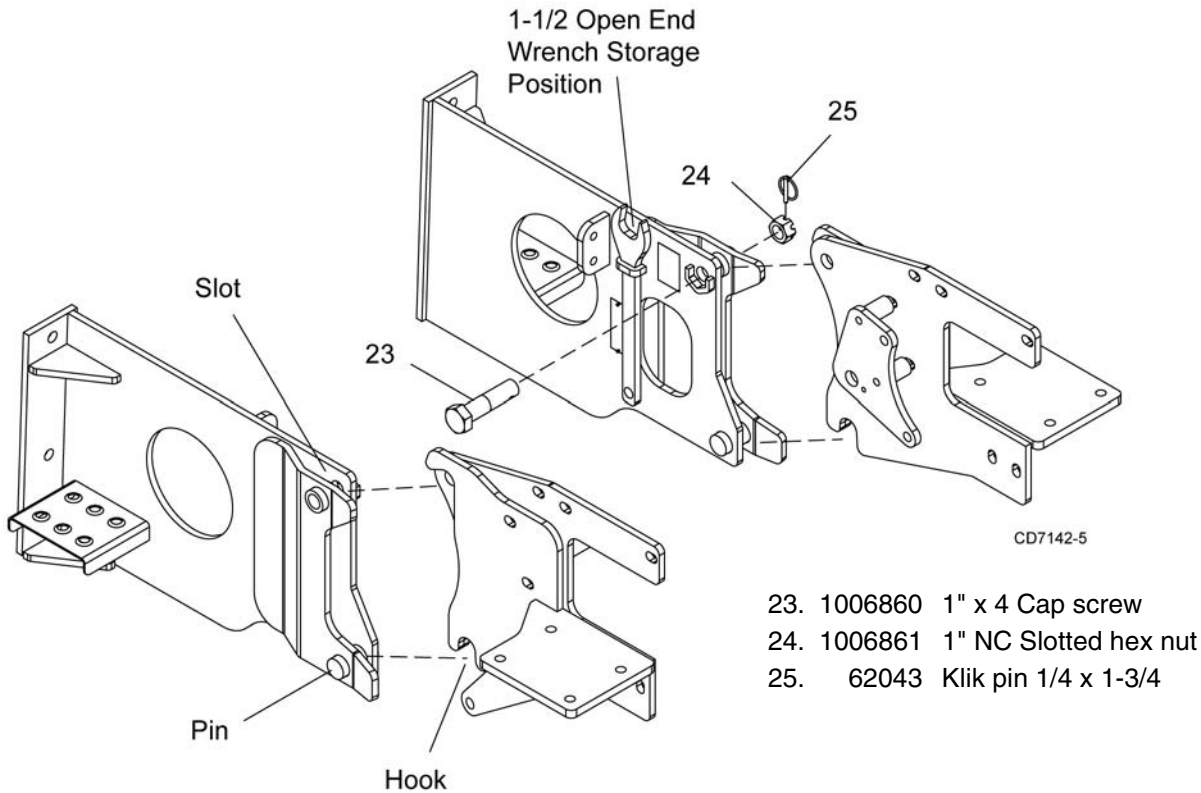


Figure 17. Backhoe to Tractor Installation (Typical)

Remove Backhoe from Tractor

DANGER

■ The only time the backhoe may be operated from a position other than the operator seat is during backhoe attachment and removal. Operator must:

- Read Mounting Kit Manual instructions on attaching and removing backhoe and use extreme care.
- Always stand between rear tire and backhoe stabilizer arms or along side of tractor to avoid being trapped should the boom swing control be accidentally activated.

WARNING

■ Remove seat and upper support assembly before installing or removing backhoe from power unit. Failure to comply may result in equipment failure and/or personal injury.

1. Position tractor on a hard, level surface and center the backhoe boom.
2. Lower stabilizers and take backhoe weight off tractor.
3. Lower boom and dipper to form 90-degree angle and rest bucket on the ground.
4. Remove the seat assembly.
5. Remove klik pins from bolt and nut assemblies.
6. Use 1-1/2-inch open end wrench supplied with the mounting kit to remove hex nuts. Return wrench to storage position (see Figure 17).
7. Use the boom to relieve excess pressure on 1-inch bolts and remove bolts.
8. Tilt backhoe main frame to separate slots on the backhoe brackets from the tractor brackets.

9. Raise stabilizers until backhoe brackets slide out of hooks on the bottom of the tractor brackets.
10. Move tractor forward to clear backhoe brackets.
11. Lower backhoe until backhoe main frame is firmly on the ground. Retract boom and dipper and place bucket cutting edge flat on the ground. See Figure 18. Connect transport lock and insert swing lock pin.
12. It may be necessary to place backhoe main frame on 6" blocks if backhoe hose lengths are not long enough to achieve proper clearance when separating backhoe from tractor.
13. Turn off engine, set brakes, and remove key.
14. Disconnect backhoe hydraulic system. See "STORAGE" on page 16.
13. Reinstall seat assembly.

NOTE: For instructions on extended storage, see backhoe operator's manual.

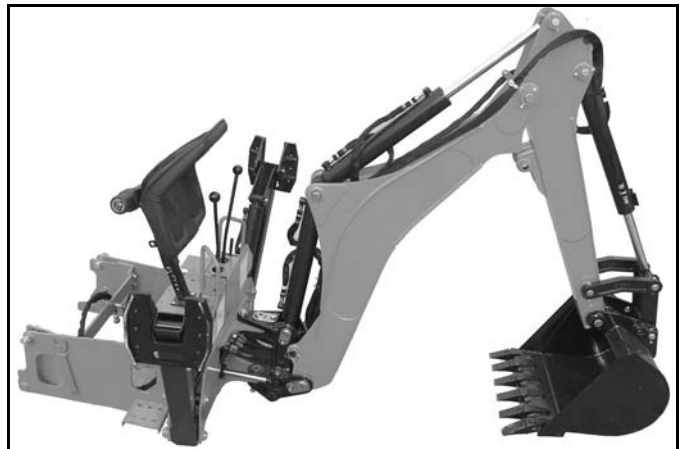


Figure 18. Backhoe Storage Position

STORAGE

Connect Hydraulic Hoses

TRACTOR: Disconnect hydraulic hoses from between backhoe and tractor.

BACKHOE: Connect hoses together to prevent dirt from accumulating in quick couplers.

-OR-

Remove hydraulic pump from the PTO shaft if equipped. Store pump on backhoe platform to prevent dirt and debris from accumulating in pump adapter.

Attach 3-Point Arms

The lower 3-point lift arms and anti-sway links can be used on tractor when backhoe is removed.

Attach 3-point lift arms anti-sway links to tractor brackets as shown in Figure 19. Secure using clevis pin (26) and safety pin previously removed with 3-point arms.

26. 62540 Clevis pin, .75 x 2.76

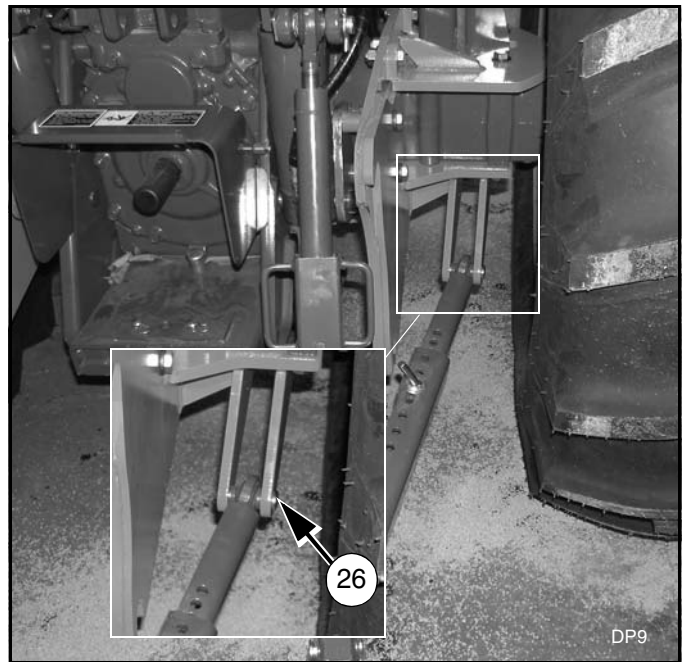
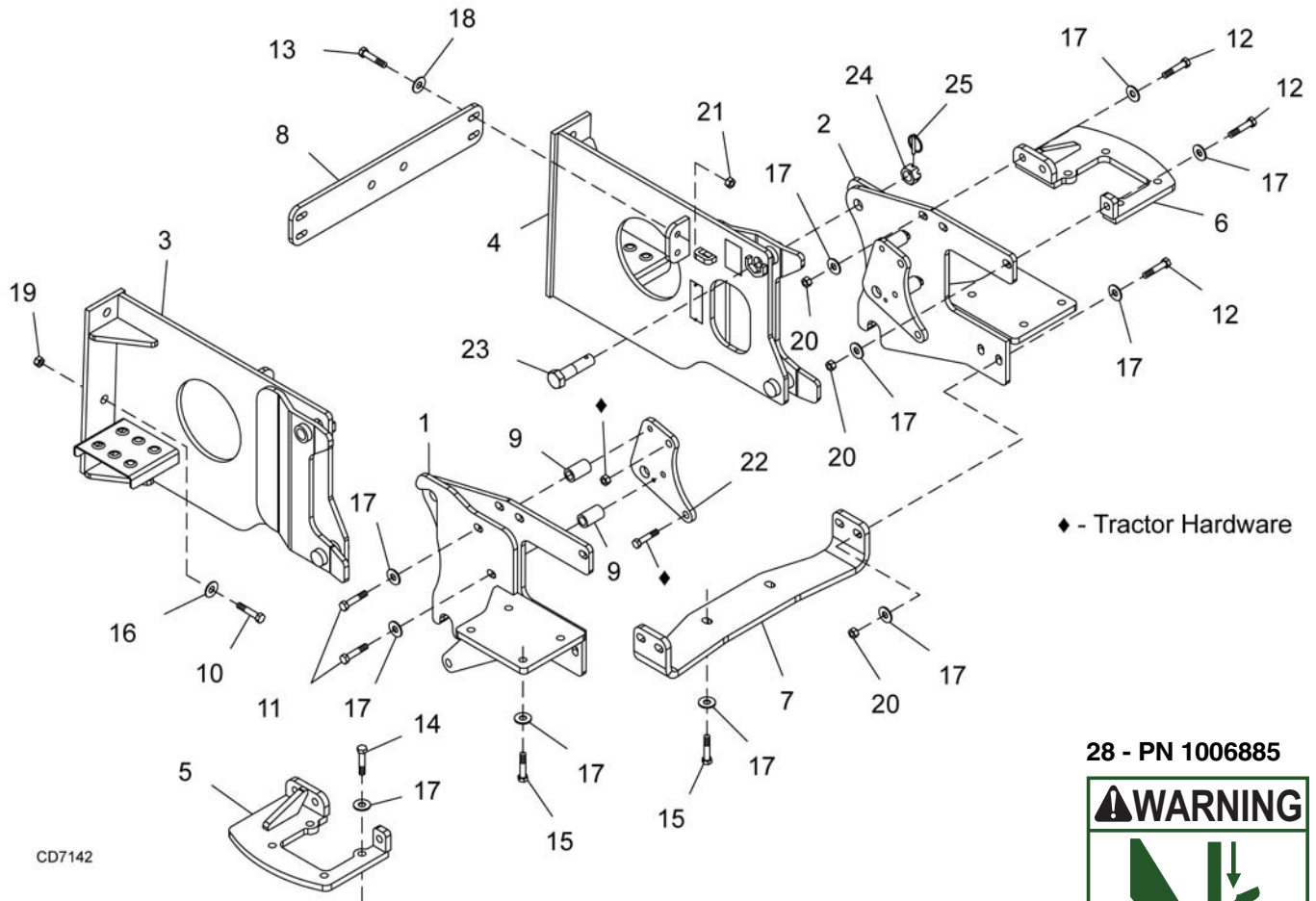


Figure 19. Right Anti-Sway Link Attached to Tractor Bracket

NOTES

1023000 4-POINT SUB-FRAME MOUNTING KIT



◆ - Tractor Hardware

28 - PN 1006885



Serial Number Plate



18 Parts

MAN0579 (1/19/2007)

1023000 4-POINT SUB-FRAME MOUNTING KIT PARTS LIST

REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	1023004	1	Right tractor bracket	16	57798	6	3/4 Hardened flat washer
2	1023005	1	Left tractor bracket	17	57817	42	5/8 Hardened flat washer
3	1023006	1	Right backhoe bracket	18	57816	4	1/2 Hardened flat washer
4	1023007	1	Left backhoe bracket	19	1450 *	6	3/4 NC Hex nut
5	1024050	1	Right top bracket	20	230 *	10	5/8 NC Hex nut
6	1024051	1	Left top bracket	21	1093 *	4	1/2 NC Hex nut
7	1024052	1	Crossmember	22	1023001	2	Cylinder bracket
8	1024322	1	Cross brace	23	1006860	2	1" NC x 4" HHCS GR5
9	1024061	4	Spacer 2.1"	24	1006861	2	1" NC Slotted hex nut
10	735 *	6	3/4 NC x 2 HHCS GR5	25	62043 *	2	1/4 x 1-3/4 Klik pin
11	300457 *	4	5/8 NC x 3-3/4 HHCS GR5	26	62540	2	Clevis pin, .75 x 2.76 (not shown)
12	902 *	10	5/8 NC x 2 HHCS GR5	27	1006883	1	1-1/2 Open end wrench (not shown)
13	3379 *	4	1/2 NC x 1-1/2 HHCS GR5	28	1006885	2	Decal, Warning - pinch point
14	59246	8	M16 x 1.5P x 60 mm HHCS CL10.9				
15	307431	10	M16 x 1.5P x 45 mm HHCS				

HHCS Hex Head Cap Screw

* Standard hardware, obtain locally

BOLT TORQUE CHART

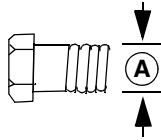
Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

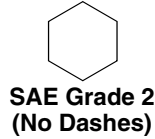
Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for metric hardware.

Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 MAR 99 & J1701M JUL 96.



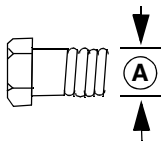
SAE SERIES TORQUE CHART



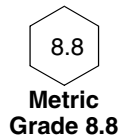
SAE Bolt Head Identification



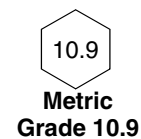
Ⓐ Diameter (Inches)	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m
1/4"	7/16"	6	8	10	13	14	18
5/16"	1/2"	12	17	19	26	27	37
3/8"	9/16"	23	31	35	47	49	67
7/16"	5/8"	36	48	55	75	78	106
1/2"	3/4"	55	75	85	115	120	163
9/16"	13/16"	78	106	121	164	171	232
5/8"	15/16"	110	149	170	230	240	325
3/4"	1-1/8"	192	261	297	403	420	569
7/8"	1-5/16"	306	416	474	642	669	907
1"	1-1/2"	467	634	722	979	1020	1383



METRIC SERIES TORQUE CHART



Metric Bolt Head Identification



Ⓐ Diameter & Thread Pitch (Millimeters)	Wrench Size	COARSE THREAD				FINE THREAD				Ⓐ Diameter & Thread Pitch (Millimeters)
		MARKING ON HEAD				MARKING ON HEAD				
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
		N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12 x 1.75	18 mm	68	50	94	70	75	55	103	76	12 x 1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

Typical Washer Installations

Lock Washer

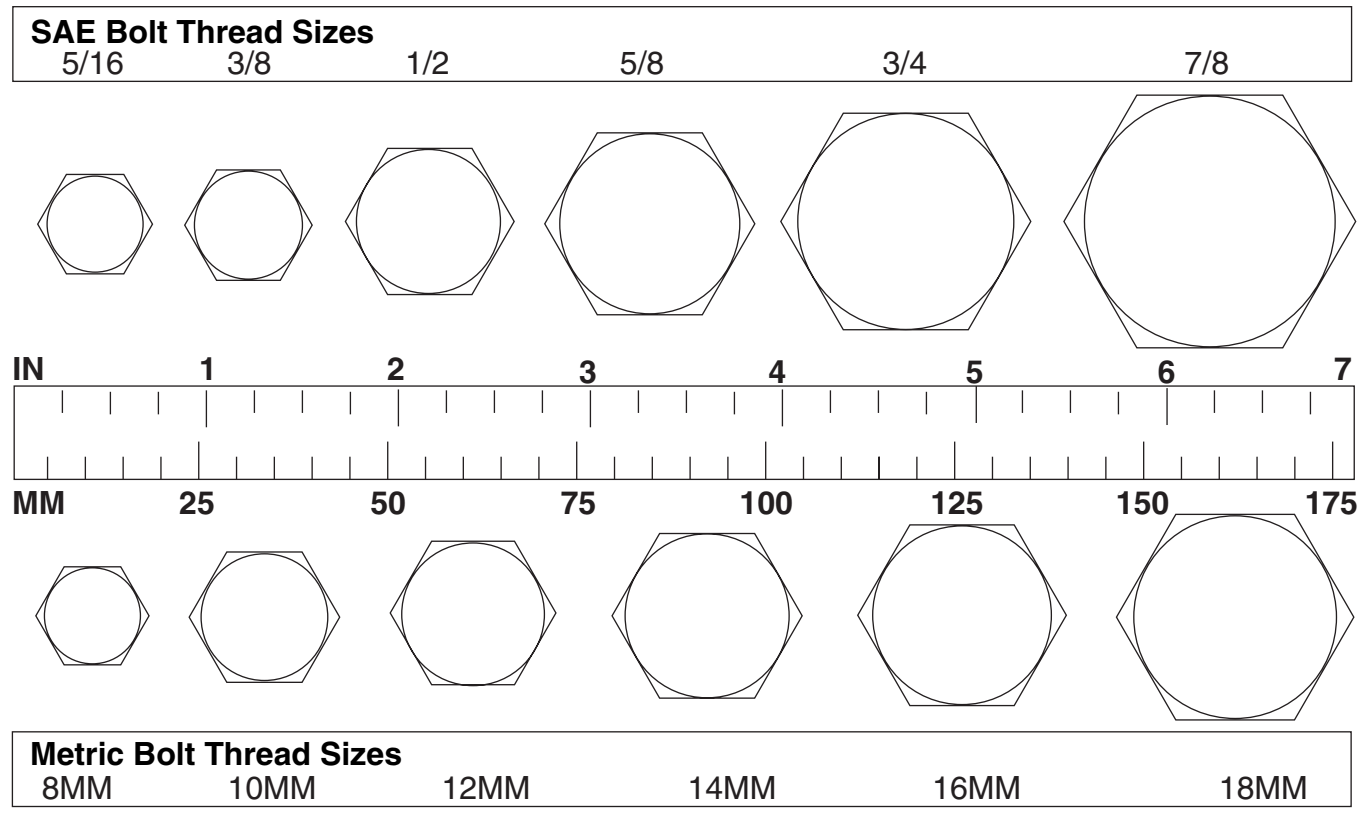
Flat Washer

Bolt

8/9/00

BOLT SIZE CHART

NOTE: Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and metric bolts.



ABBREVIATIONS

AG Agriculture
 ATF Automatic Transmission Fluid
 BSPP British Standard Pipe Parallel
 BSPTM British Standard Pipe Tapered Male
 CV Constant Velocity
 CCW Counter-Clockwise
 CW Clockwise
 F Female
 GA Gauge
 GR (5, etc.) Grade (5, etc.)
 HHCS Hex Head Cap Screw
 HT Heat-Treated
 JIC Joint Industry Council 37° Degree Flare
 LH Left Hand
 LT Left
 m Meter
 mm Millimeter
 M Male
 MPa Mega Pascal
 N Newton

NC National Coarse
 NF National Fine
 NPSM National Pipe Straight Mechanical
 NPT National Pipe Tapered
 NPT SWF National Pipe Tapered Swivel Female
 ORBM O-Ring Boss - Male
 P Pitch
 PBY Power-Beyond
 psi Pounds per Square Inch
 PTO Power Take Off
 QD Quick Disconnect
 RH Right Hand
 ROPS Roll-Over Protective Structure
 RPM Revolutions Per Minute
 RT Right
 SAE Society of Automotive Engineers
 UNC Unified Coarse
 UNF Unified Fine
 UNS Unified Special

WARRANTY

(All Models Except Mow'n Machine™ Zero-Turn Mowers and Woods Boundary™ Utility Vehicles)

Please Enter Information Below and Save for Future Reference.

Date Purchased: _____ From (Dealer): _____

Model Number: _____ Serial Number: _____

Woods Equipment Company ("WOODS") warrants this product to be free from defect in material and workmanship. Except as otherwise set forth below, the duration of this Warranty shall be for TWELVE (12) MONTHS COMMENCING ON THE DATE OF DELIVERY OF THE PRODUCT TO THE ORIGINAL PURCHASER.

Woods backhoe models BH70-X, BH80-X, and BH90-X are warranted for two (2) years from the date of delivery to the original purchaser.

The warranty periods for specific parts or conditions are listed below:

Model Number	Part or Condition Warranted	Duration (from date of delivery to the original purchaser)
PHD25, PHD35, PHD65, PHD95, 1260, 2162, 3240, BB48, BB60, BB72, BB84, BB600, BB720, BB840, BB6000, BB7200, BB8400, BW180-2, BW1800, DS96, DS120, DS1260, DSO1260, DS1440, TS1680, RCC42, RM550-2, RM660-2, RM990-3, PRD6000, PRD7200, PRD8400, 7144RD-2, 9180RD-2, 9204RD-2, S15CD, S20CD, S22CD, S25CD, S27CD	Gearbox components	5 years
RDC54, RD60, RD72	Gearbox components	3 years (1 year if used in rental or commercial applications)
RM550-2, RM660-2, RM990-3, PRD6000, PRD7200, PRD8400, 7144RD-2, 9180RD-2, 9204RD-2	Blade spindles	3 years
BB600, BB720, BB840, BB6000, BB7200, BB8400, BW126, BW180, BW1260, BW1800, 1260, 2162, 3240	Rust-through	10 years

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not apply in the event that the product has been materially modified or repaired by someone other than WOODS, a WOODS authorized dealer or distributor, and/or a WOODS authorized service center. This Warranty does not cover normal wear or tear, or normal maintenance items. This Warranty also does not cover repairs made with parts other than those obtainable through WOODS.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

WOODS makes no warranty, express or implied, with respect to engines, batteries, tires or other parts or accessories not manufactured by WOODS. Warranties for these items, if any, are provided separately by their respective manufacturers.

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. **The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. WOODS MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND WOODS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

WOODS shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the generality of the foregoing, Woods specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply which may directly affect WOODS' ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, serviceperson, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

Answers to any questions regarding warranty service and locations may be obtained by contacting:

Woods Equipment Company

2606 South Illinois Route 2
Post Office Box 1000
Oregon, Illinois 61061

800-319-6637 tel
800-399-6637 fax
www.WoodsEquipment.com



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BMP®

CENTRAL FABRICATORS®

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WARRANTY

(Replacement Parts For All Models Except Mow'n Machine™
Zero-Turn Mowers and Woods Boundary™ Utility Vehicles)

Woods Equipment Company ("WOODS") warrants this product to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the product to the original purchaser with the exception of V-belts, which will be free of defect in material and workmanship for a period of 12 months.

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not cover normal wear or tear, or normal maintenance items.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. **The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

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